

# Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

# Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

DEVAL L. PATRICK Governor RICHARD K. SULLIVAN JR. Secretary

TIMOTHY P. MURRAY Lieutenant Governor KENNETH L. KIMMELL Commissioner

April 22, 2013

Michael L. Thoreson Commissioner of Public Works City of Brockton City Hall – Third Floor 45 School Street Brockton, Massachusetts 02301

### RE: ADMINISTRATIVE AMENDMENT TO PLAN APPROVAL

310 CMR 7.02(13) Administrative Amendment to Plan Approval No. 4I09034 Administrative Amendment Application No. SE-13-014

Source No. 2233

AT: Brockton Advanced Water Reclamation Facility

303 Oak Hill Way

Brockton, Massachusetts 02301

Dear Mr. Thoreson:

The Department of Environmental Protection (MassDEP or Department), Bureau of Waste Prevention has received a letter dated January 17, 2013 (Application), submitted on your behalf by CDM Smith Inc.'s Frank Sapienza, Principal Engineer. The letter requests changes to be made in order to correct NO<sub>x</sub> emissions errors contained in previously submitted Application No. 4I09034, including Plan Approval No. 4I09034 issued by MassDEP on May 30, 2012.

The MassDEP, in response to your January 17, 2013 request hereby issues a corrected replacement page 4 of 7 (April 22, 2013) of Plan Approval No. 4I09034 superseding past issued page 4 of 7 (May 30, 2012), thereby making the May 30, 2012 page 4 of 7 null and void.

The Application was submitted in accordance with Section 7.02 Plan Approval and Emissions Limitations as contained in 310 CMR 7.00 "Air Pollution Control Regulations," adopted by the Department pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-E and Chapter 21C, Sections 4 and 6.

The Department's review has been limited to air pollution regulation compliance and does not relieve you of the obligation to comply with all other permitting requirements.

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The Department is of the opinion that the application is in conformance with current air pollution control engineering practices, and hereby approves Administrative Amendment to Plan Approval, Application No. SE-13-014.

The Department has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Environmental Affairs, for air quality control purposes, was not required prior to this action by the Department. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and Regulations 301 CMR 11.00, Section 11.04, provide certain "Fail-Safe Provisions," which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

This Administrative Amendment to Plan Approval is an action of the Department; you have a limited right to appeal. Please refer to the enclosed "APPEAL" information.

Should you have any questions pertaining to this ADMINISTRATIVE AMENDMENT TO PLAN APPROVAL, please contact the undersigned at the Regional Office at (508) 946-2824.

Very truly yours,

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Thomas Cushing, Chief Permit Section Bureau of Waste Prevention

#### MRP

Attachment: Replacement Pg. 4 of 7 dated April 22, 2013 (Plan Approval No. 4I09034)

ecc: David Norton, City of Brockton, MA
Lawrence Rowley, City of Brockton, MA
Ian W. Mead, CDM, Cambridge, MA
Frank Sapienza, CDM, Cambridge, MA
Brockton Board of Health
Brockton Fire Department
Y. Tian, MassDEP/Boston
M. Pinaud, MassDEP/SERO
L. Black, MassDEP/SERO

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#### ATTACHMENT 1

## APPEAL OF APPROVAL

This Approval is an action of the Department. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

The request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below.

The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

The Department may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

#### **EMISSION LIMITS:**

1. This Plan Approval establishes new incinerator emission limits. The incinerator shall not exceed the emission limits as specified in Table 1.

Table 1 : INCINERATOR EMISSION LIMITS				
Emission	Emission Limit/Standard <sup>1</sup>	Pounds per Hour <sup>1, 2</sup>	Tons per Month <sup>3</sup>	Tons per Year <sup>4, 5</sup>
CO	1,676 ppmvd @ 7% O <sub>2</sub>	43.05	15.71	188.6
$SO_2$	26 ppmvd @ 7% O <sub>2</sub>	1.56	0.57	6.8
$VOC^6$	100 ppmvd @ 7% O <sub>2</sub>	4.02	1.46	17.6
$NO_x^{10}$	220 ppmvd @ 7% O <sub>2</sub>	9.31	3.40	40.8
$PM^7$	31 mg/dscm @ 7% O <sub>2</sub> and 0.865 lb/ton dry sludge	0.65	0.24	2.84
$PM10^{8}$	32 mg/dscm @ 7% O <sub>2</sub>	0.60	0.22	2.63
PM2.5 <sup>8</sup>	32 mg/dscm @ 7% O <sub>2</sub>	0.47	0.17	2.04
As	0.012 mg/dscm @ 7% O <sub>2</sub>	0.00024	0.00009	0.0010
Be	1.0 grams/24-hour period	0.00012	0.00033	0.0004
Cd	0.05mg/dscm @ 7% O <sub>2</sub>	0.00100	0.0004	0.0044
Cr	0.06 mg/dscm @ 7% O <sub>2</sub>	0.00120	0.0004	0.0052
Hg	60.5 grams/24-hour period and 0.28 mg/dscm @ 7% O <sub>2</sub>	0.00556	0.0020	0.0243
Ni	0.02 mg/dscm @ 7% O <sub>2</sub>	0.00038	0.00014	0.0017
Pb	0.20 mg/dscm @ 7% O <sub>2</sub>	0.00395	0.0014	0.0173
Opacity <sup>9</sup>	0%			

#### Note:

- 1 The average of three one hour or longer stack emission test runs per Special Condition No. 2.
- 2 Dewatered sludge charging rate 1,500 dry pounds per hour.
- 3 Dewatered sludge charging rate 547.5 dry tons per month.
- 4 Dewatered sludge charging rate 6,570 dry tons per consecutive 12-month period.
- 5 Tons per consecutive 12-month period.
- 6 As propane.
- 7 Per test methods contained in 40 CFR 60, Appendix A, Method 5, or other test method(s) acceptable to MassDEP.
- 8 Per test methods contained in 40 CFR 51, Appendix M, Method 201 or 201A and Method 202, or other test method(s) acceptable to MassDEP.
- 9 Exclusive of uncombined water vapor 6-minute block average.
- 10 Revised corrected emissions (in bold and italic) Administrative Amendment to Plan Approval (Application No. SE-13-014)

# TESTING, MONITORING AND RECORD KEEPING REQUIREMENTS:

- 1. Once every 24 hours, sludge pounds per hour feed rate, % dry solids and % volatiles.
- 2. Hourly fuel feed rate of natural gas.
- 3. Continuously monitor and maintain a record of the exhaust gas oxygen and total hydrocarbon content.
- 4. Continuously monitor and maintain a record of the quench inlet and outlet gas temperatures.
- 5. Continuously monitor and maintain a record of the scrubber water flow rate to the quench, to the impingement trays and to the multiple venturis.
- 6. Continuously monitor and maintain a record of the following scrubber system temperatures:
  - a) Inlet to impingement trays (same as quench outlet)